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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,900

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Arnaud Bailleul

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LOWE HAUPTMAN & BERNER, LLP
1700 DIAGONAL ROAD, SUITE 300
ALEXANDRIA, VA 22314

EXAMINER

DAO, THUY CHAN

ART UNIT

PAPER NUMBER

2192

MAIL DATE

DELIVERY MODE

07/07/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,900	Applicant(s) BAILLEUL, ARNAUD	
	Examiner Thuy Dao	Art Unit 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the amendment filed on April 2, 2009.
2. Claims 1-10 have been examined.

Response to Amendments

3. In the instant amendment, claims 1-10 have been amended.
4. The objection to the drawings, claims, and specification is withdrawn in view of Applicant's amendments.
5. The 35 USC §112 rejection over claims 5-6 and 8-10 is withdrawn in view of Applicant's amendments.

Specification

6. In page 4, the term "*requirement*)" is considered to read as - *-requirement*[[()]]- -. Appropriate correction is requested.

Claim Objections

7. Claim 1 is objected to because of minor informality. In lines 6-7, the term "*the creation of the element*" is considered to read as either - *-[[the]] creation of the element*" or - *- [[the]] a creation of the element*- -. Appropriate correction is requested.

Response to Arguments

8. Applicants' arguments have been considered.

a) Rejections under 35 USC section 102 (Remarks, pp. 6-7):

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a requirement as "... any constraint function (such as that in our figure 2)" and "...performing a traceability like the one performed according to the claimed/disclosed invention", Remarks, page 7, emphasis added) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the

specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Per the plain language of claim 1, Rhapsody-4.1 explicitly teaches *a method of requirements traceability based on a UML model, comprising the steps of:*

using a graphics interface (e.g., page 1-8, using the Browser in left panel, which shows every element such as package, class, use case,... in a UML model)

when creating an element of the UML model (e.g., page 1-9, creating a class/element “Display”; wherein “Display” has a creation “Hello”),

placing a requirement immediately on the element in this graphics interface (e.g., pages 1-11, the Features window, requirements such as Stereotype, Visibility (such as “Public”), number/type of constructor arguments (page 1-10, no argument); page 1-12, an implementation requirement such as outputting the greetings “Hello World”) *and*

the element is systematically filled in with an upward requirement which has given rise to a creation of the element (e.g., page 1-18, generating code, i.e., creation of said class/element “Display” and said class/element “Display” is generated/inserted/ filled in with the constructor requirement (such as no argument required) and the implementation requirement (outputting “Hello World”); page 1-19, outputting “Hello World”, creation “Hello” in page 1-11 does not need any argument for its member class/element “Display”).

b) Rejections under 35 USC section 103 (Remarks, page 7):

Claims 5-6 and 8-10 are also rejected based on virtue of their dependencies on the rejected base claim 1.

In conclusion, the examiner respectfully maintains ground of the 35 USC §102 and 103 rejections over claims 1-10.

Claim Rejections – 35 USC §102

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9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

10. Claims 1-4 and 7 are rejected under 35 U.S.C. 102(a) as being anticipated by Rhapsody-4.1 (art of record, “Essential Rhapsody in C++” version 4.1, published January 1, 2003).

Claim 1:

Rhapsody-4.1 discloses *a method of requirements traceability based on a UML model, comprising the steps of:*

using a graphics interface (e.g., page 1-8, using the Browser in left panel, which shows every element such as package, class, use case,... in a UML model)

when creating an element of the UML model (e.g., page 1-9, creating a class/element “Display”; wherein “Display” has a creation “Hello”),

placing a requirement immediately on the element in this graphics interface (e.g., pages 1-11, the Features window, requirements such as Stereotype, Visibility (such as “Public”), number/type of constructor arguments (page 1-10, no argument); page 1-12, an implementation requirement such as outputting the greetings “Hello World”) and

the element is systematically filled in with an upward requirement which has given rise to a creation of the element (e.g., page 1-18, generating code, i.e., creation of said class/element “Display” and said class/element “Display” is generated/inserted/ filled in with the constructor requirement (such as no argument required) and the implementation requirement (outputting “Hello World”); page 1-19, outputting “Hello World”, creation “Hello” in page 1-11 does not need any argument for its member class/element “Display”).

Claim 2:

Rhapsody-4.1 discloses *the method as claimed in claim 1, comprising the steps of: when creating a UML requirement which has repercussions on several elements of the model, attaching said requirement to the common element containing the set of elements on which the requirement has repercussions* (e.g., page 1-7, project “Hello” has a common folder requirement as “c:\work\Hello”; page 1-18, directory “c:\work\Hello”; page 1-25, files/elements of the project “Hello” have the same directory/folder).

Claim 3:

Rhapsody-4.1 discloses *the method as claimed in claim 1, comprising the steps of: when an element of the model is deleted, all the UML requirements attached to this element are likewise deleted* (e.g., page 1-9, deleting class “Display” from the entire model).

Claim 4:

Rhapsody-4.1 discloses *the method as claimed in claim 3, wherein all the UML requirements attached to all the elements attached to said element are likewise deleted* (e.g., page 1-10, when class “Display” is deleted, its constructor is also deleted with all attached requirements).

Claim 7:

Rhapsody discloses *the method as claimed in claim 2, wherein when an element of the model is deleted, all the UML requirements attached to this element are likewise deleted* (e.g., page 1-9, a class is deleted from the entire model; page 1-11, “Delete from Model”).

Claim Rejections – 35 USC §103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 5-6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhapsody-4.1 in view of Kobryn (art of record, “Visual Requirements-Driven Development with UML 2.0”).

Claim 5:

Rhapsody-4.1 does not explicitly disclose *the method as claimed in claim 1, comprising the steps of: the UML requirements are exported to a requirements management tool so as to ensure therein their management and their traceability.*

However, in an analogous art, Kobryn further discloses *the UML requirements are exported to a requirements management tool so as to ensure therein their management and their traceability* (e.g., page 26, 29, and 31).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Kobryn’s teaching into Rhapsody-4.1’s teaching. One would have been motivated to do so to “navigate to DOORS” as suggested by Rhapsody-4.1 (e.g., page 1-11) and automate validation and verification as suggested by Kobryn (e.g., page 26, 29, and 31).

Claim 6:

Rhapsody-4.1 discloses *the method as claimed in claim 5, comprising the steps of: the UML requirements are exported to the requirements management tool, in the course of the development of the model, each time that this model has attained a stable state.*

However, in an analogous art, Kobryn further discloses *the UML requirements are exported to the requirements management tool, in the course of the development of*

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the model, each time that this model has attained a stable state (e.g., page 26, 29, and 31).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Kobryn's teaching into Rhapsody-4.1's teaching. One would have been motivated to do so to "navigate to DOORS" as suggested by Rhapsody-4.1 (e.g., page 1-11) and iterate testing/validation/verification upon the granularity of the requirements as suggested by Kobryn (e.g., page 26-27, 29, and 31).

Claims 8-10:

Claims 8-10 depend on claims 2-4, respectively, which recite(s) the same limitations as those of claim 5, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claim(s), it also teaches all of the limitations of claims 8-10.

Conclusion

13. THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone/fax numbers are (571) 272 8570 and (571) 273 8570, respectively. The examiner can normally be reached on every Tuesday, Thursday, and Friday from 6:00AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Thuy Dao/
Examiner, Art Unit 2192

/Tuan Q. Dam/
Supervisory Patent Examiner, Art Unit 2192